

Free school feeding program - An important factor for children enrolment at Early Childhood Development centers in rural communities

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ABSTRACT

The Convention on the Rights of the Child (UNGA, 1989)¹ clearly spells out the significance of early child development (ECD). Through a descriptive comparative study, and by randomized control trial, the researcher investigates if free school feeding programs affect children enrollment at ECD centers in rural communities taking the case of Maraba Sector of Huye District in Rwanda. Also, the researcher sought to find if this also helped increase the popularity of the intervention. The researcher obtained data from 127 participants' representative of the 6 Cells in the Sector where 65 were composed of the experimental group and 62 comprised the control group. The study found noteworthy popularity (98%) indicating high impact amongst the beneficiaries but abysmal at below the accepted level of 60% with the control group. Over 90% beneficiaries agreed positive high impact on enrolment while same proportion in control group also supported the fact free school feeding positively impacts children enrolment at the ECD centers. The study recommended amongst others that free school feeding program should be maintained in order to keep improving children enrollments at the ECD centers in the communities and so as to also maintain or possibly improve the popularity of the intervention in the communities.

Key Terms: Early Childhood Development, Popularity of Intervention, School Feeding Program, Learning Approach, Cognitive Development, Experimental Group, Control Group, Caregivers, ECD Policy, Key Evaluation Question

INTRODUCTION

Over 200 Million children from least developed and developing countries in Africa under the age of five are often at risk of falling behind from reaching their optimum development potential as a result of poor nutrition, poverty and poor learning facilities (Lancet, 2007)². According to a 2019 UNICEF global report on pre-primary education, half of the world's children ages within the pre-school age don't have access to early childhood education during this vital period of their lives. The report further showed that about 8 in 10 children (78%) are missing out on this opportunity. This reality is a huge challenge for future educational development. Currently, researchers in Early Childhood Development (ECD) are proving with scientific evidence the determining influence of early development on the chances of success later in life.

The Convention on the Rights of the Child (UNGA, 1989)¹ clearly spells out the significance of early child development. The document shows that a child has a right to develop to "the maximum extent possible." (Article 6) and that "States Parties recognize the right of every child to a standard of living adequate for the child's physical, mental, spiritual, moral and social development" (Article 27) (UNGA, 1989)¹. This is an affirmation that the right to a child's development has been accepted and embraced by the international community.

The National Early Childhood Development Program (NECDP) in Rwanda has the mandate to manage all ECD program implementation in the country with a covering from the Ministry of Gender and Family Promotion (MIGEPROF). The current ECD Policy (Uburere buruta ubuvuke) was produced in 2016 under the MIGEPROF, and it is in consonance with the vision of the Government of Rwanda towards the transformation of the economy into a knowledge-based economy. The notion is the improvement of human skills and knowledge development especially for the young generation through ECD interventions.

ECD is about supporting a child in the critical early years, providing holistic access to early learning, good nutrition, hygiene, and protection. The first 1,000 days from conception to age two are increasingly being recognized as very important to the development of neural pathways that lead to linguistic, cognitive and socio-emotional capacities that are also predictors of labor market outcomes later in life (Atinc & Gustafsson-Wright, 2013)³. Cognitive development in a child is essential and also serves as a significant factor in the welfare of the child (Case and Paxson, 2008)⁴.

According to the general objective of the revised National Early Childhood Development Program, as managed by the Ministry of Gender and Family Promotion (MIGEPROF), the program policy seeks to ensure improved quality and access to ECD services by all the intended beneficiaries in a clear coordinated and sustainable manner (Ministry of Gender and Family Promotion, 2016). This is also reflected in the Economic Development and Poverty Reduction Strategy (EDPRS, 2010) II of the government development agenda. The NISR (2012) estimated 15% of the total child population of 5 million as potential ECD services beneficiaries. And one of the NECDP's desired goal is to provide model ECD centers in each of the 14,837 villages in Rwanda to cater for the children. However, the reality is that majority of the pre-primary schools are found in cities and other urban areas. Also, the current number of preschool or centers available nationwide and providing ECD services is still a far cry from the original ambition of 1 preschool per Cell (i.e. 2,148 total) by 2017 or 1 model ECD center per village.

In response to these shortcomings, this study proposes to investigate several options for making ECD centers more effective and efficient especially with respect to the provision of services that enhances the holistic development of the child. The researcher conducted a comparative study of the impact evaluation of ECD centers in Maraba sector of Huye District in order to identify gaps in service provision with respect to the popularity of the program, and whether school feeding program affect enrolment of children at the ECD centers in the communities. For the purpose of this paper, from the Likert questions, only the elements of the following research questions or Key Evaluation Questions (KEQ) are presented;

- Popularity of the ECD program
- Children enrolment
- School feeding program

MATERIALS AND METHODS

Data

To ensure representation, data was obtained from 1 village each from all the 6 cells in Maraba sector of Huye district in Rwanda using questionnaire, observation and informal conversation with respondents. Maraba sector was selected from the total number of 14 sectors using a simple random sampling. First, the population was divided into two clusters of urban and rural sectors. The probability sampling technique was used through a simple random sample of the rural cluster as the population of interest. The intention is to enable appropriate generalization. An initial total of N = 182 respondents completed the survey containing questions about demographics, KEQs, and opinions. Of the pool of initial total number of respondents who were screened, a final sample of N = 127 participants was retained for analysis. From this number, 65 respondents form the experimental group while 62 participants form the control group thereby indicating the study as a descriptive comparative study using randomized control trial (RCT) (White, Sabarwal & Hoop, 2014)⁵.

Analytical Methods

An important aspect of every evaluation is the analysis of several data so as to draw up a summary from them while looking for patterns (Peersman, 2014)⁶. Also, I had to make use of some form of deductive and inductive reasoning in order to make sense of the data (Best & Khan, 2006)⁷ especially from the observations done. This study was conducted using a mixed-method (Appleton & Booth, 2005)⁸ design to inform decisions about identified gaps which can be mitigated so as to ensure continuity of the ECD interventions and also for likely scale-up. The nomenclature adopted is called Program Impact Evaluation Survey (PIES).

The questionnaire (Richard & Schmidt (2002) designed for the PIES have 34 items (Appendix 1) with 3 question-type parts and these parts:

- Likert Scale question
- Dichotomous questions and the
- Opinion-based questions

The Likert Scale component has 24 questions with a response grade of five points indicating the degree or extent of agreement with a statement in descending order: 5= Strongly Agree/A Very Large Extent; 2=Agree/Large Extent; 3=Neutral/Uncertain; Disagree/Small Extent; 5= Strongly Disagree/Very Small Extent. Data were entered into

Microsoft excel spreadsheet where they were analyzed and also coded using specific steps designed for the purpose in order to determine the status of each KEQ.

The aim of the PIES instrument is to obtain information from beneficiaries (intended or otherwise) and non-beneficiaries who were typically ‘ruled out’ of the intervention. The essence is for them to share what their experience of the ECD intervention has been or otherwise. The adoption of the work of Al Rubaish (2010)⁹ here on the contribution of Student Experience Survey (SES) is to adapt the cumulative percentage portion to suit the analysis purpose of this research.

Table 1: Criteria used for the analysis of the PIES items

Cumulative %	Impact Grading
80 & Above	Indicate high quality impact
60 to < 80	Indicate impact with acceptable performance
< 60	Indicate impact with highly needed improvement

Source: Author (Adapted from Al Rubaish 2010)

According to Al Rubaish (2010)⁹, the analysis approach is straight forward, easy to comprehend, can be used by lower level administrators, and evidences produced can be interpreted easily for further actions on program improvement where necessary.

RESULTS

Each item in form of the Likert questions were analyzed one after the other as part of a domain representing a KEQ from the three under consideration. The findings as obtained from the two groups of 127 respondents in the 6 villages are described in the subsequent sections.

Popularity of the Intervention

Table 2 shows that the experimental group confirmed an excellent level of awareness of an ECD center at 100% affirmation. The control group, however, indicated the adverse as merely 19% (poor performance) could relate to the presence and importance of an ECD center. The control group didn’t agree at all that the presence of an ECD in their community or the community participating in the intervention has made any significant impact as unfortunately, they do not even have sufficient awareness that such intervention is there. The experimental group confirmed they are pleased with the presence of the ECD center in their community, however, reverse is the case with the control group as none of them agreed to the KEQ, hence, the need for improvement in the sensitization strategy.

Table 2: Comparison Matrix for Popularity of Intervention

KEQ	Experimental Group	Control Group
To what degree are you aware of any ECD Centre within your community?	100%	19%
How much do you agree or disagree that attending ECD Centre is important for a child?	100%	19%
Has the presence of an ECD Centre in your community made any significant impact in the community?	100%	0%

To what extent would you say school feeding program affects enrolment at the ECD Centre?	98%	90%
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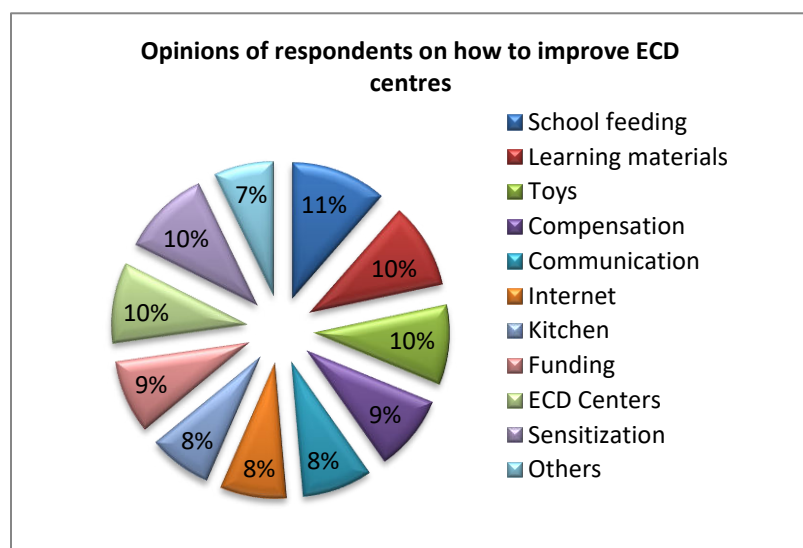
Children Enrolment

As indicated in Table 2, cumulatively, over 90% of the respondents in the experimental group agreed to the fact that the availability of school feeding programs, positive and active attitude of parents, non-fee payment and a clean, safe and secure environment contribute immensely to the decision to enroll their children in the ECD centers.

Free School Feeding

In both groups, question on free school feeding program commanded considerably very high response with over 90% on both divides as indicated in Table 2 above. Further in Figure 1 below, the respondents showed free school feeding is a high-quality determinant for the enrolment of a child at an ECD center in the communities.

Fig 1: Percentage representation of opinions by participants



DISCUSSION

A point to bring to note here is that the purpose of this paper was to indicate the impact of free school feeding program as an important element in enrolment of children in ECD centers in rural communities and then identify recommendations for better ECD centers as an intervention in the rural communities. The study investigated two different groups of those who in one way or the other have benefited from the intervention and those who are not beneficiaries. The results of the findings were compared in order to identify grey areas regarding the intervention which then led to the succeeding recommendations. Below, the results are discussed in full consideration of the KEQs with references to the Rwanda ECD Policy (2016) “Uburere buruta ubuvuke” and the National ECD Policy Strategic Plan (2016-2021) documents, and by confronting these with some existing theoretical models as documented earlier in the literature review of this work.

The theoretical perspective on cognitive development discussed in chapter two assumed that typical cognitive development refers to expected gains in language, thinking and understanding all of which incorporates intelligence, numerical ability, memory, problem-solving, literacy, learning ability, literacy, cognitive control and academic attainment (Rao et al, 2014)¹⁰. The global report on pre-primary education by UNICEF (2019) showed that about 78% (8 in 10) children are missing out on quality early childhood education and care. This failure does reduce the chances of holistic development and likely success later in life. The impact of ECD programs establishes the promise for the well-being of the child, the family and the community at large. And as observed from the study, there is no perceived evidence to show how the ECD centers may have failed in providing services to the populace.

The CRC and the UNDHR recognize access to education as a basic right (King & McGrath, 2002)¹¹. Mansaray (1991)¹² posited that the accelerated development of societies in Africa largely depends on the level or extent to which quality education is made available and accessible to as many people as possible. Unfortunately, the study showed that a lot is still needed to be done especially at the grassroots level, not only to provide standard ECD centers where children can have access to quality early childhood education and care but also in the area of public education and sensitization towards proper awareness of such interventions in the community.

No singular factor can be said to be the only determinant for the enrolment of a child at an ECD center. However, the role of free school feeding programs cannot be overemphasized in the decision to enroll a child. And again, this decision is further dependent on factors such as how much value parents put on education and development of their children, how far are they aware of the opportunities provided by the intervention, how much knowledge do they actually have concerning early childhood development and care and concerning their rights as parents. It is to this end that Fineman and Worthington (2009)¹³ shared that the rights of children cannot be fully discussed in the absence of discussions of the rights of the parents. The CRC recognizes that it is expedient to strengthen the rights of parents in order to also strengthen the rights of children. Also, according to Yamada (2007)¹⁴, the choices that parents make concerning their children's academics may not always be mainly educational but could also be social or economic as well. Poverty is also an influential element in determining the enrolment of a child for pre-primary education. In most rural communities like Maraba sector where the study has taken place, the poverty level is very high as most families live below the poverty level and thereby exposing their children to environmental and psychosocial challenges unlike children from wealthier homes (Crockett & Haushofer, 2014)¹⁵. This will obviously be the case for many children of parents from the control group who do not have access to the intervention. Their growth and development are more likely to be hampered (Shonkoff et. al, 2012)¹⁶. Early development opportunities establish a critical foundation for children's academic success, health and general wellbeing (VanLandeghem, Curgins & Abrams, 2002)¹⁷. Hence, the design of an all-inclusive quality early childhood development program should cater for the enhancement of cognitive and socio-emotional capabilities of preprimary children. Further, the intervention should be in such a way that children from poor or disadvantaged homes or communities must also benefit without making them feel inferior or in the face of any discrimination. And this is where the recommendation to maintain the the school feeding programs for the ECD centers remains an important element to improve enrolments.

One of the core accomplishments, as observed from the ECD centers, is the successful provision of meals for the children daily. The benefits can be seen in two ways. First, parents are confident that while they go about their daily economic activities for their livelihood, their children will not go hungry. And second, for the children, it is obvious that if they are well fed, learning becomes quite easier, and they can grow well and cognitive development is also enhanced. The attestation from parents whom the researcher had informal conversations with showed that there is a significant level of satisfaction on the privilege of having their children as beneficiaries of the intervention. The prospects of exposure to early learning ground the foundation of how well a child will successfully accomplish his or her future educational capabilities. However, the reverse will be the case for a child that lacks the preparedness that ECD centers offer as that child will most likely be faced with the risk of falling behind. According to Justice et al (2007)¹⁸, underdeveloped skills in reading, language, and social-behavioral competence are indicators of predicting poor future academic performance. This indicates that the opportunities provided by early learning, proper brain development, and overall health are essential for a child's lifespan development. Janus & Duku (2007)¹⁹ reiterated that having school readiness skills is not an attribute that suddenly happen, rather it is the outcome of a child's development at a certain point. Upon entry into primary school, the expectation is that children will have some level of self-regulation, sustained behavioral inhibitions, positive interpersonal relationship with peers and teachers, carry out goal-oriented activities, possess sound physical health and have basic cognitive skills in language, math and reading (Bierman et al, 2008; Kagan, 1990)^{20, 21}

The outcome in this study shows that the provision of free school feeding at the ECD centers goes a long way to influence the decision of parents to enroll their children at the ECD centers in the rural communities. As a result of the prevailing economic status of the parents, first they consider the intervention as an opportunity for their children to benefit from enjoying proper meals for breakfast and lunch at no cost. It was also discovered that the school feeding program is one of the main elements of the interventions that helped to raise the popularity of the ECD centers amongst the communities where they exist as confirmed most especially by the program beneficiaries.

CONCLUSION AND RECOMMENDATION

The purpose of the study was to weigh the impact that ECD centers have as an intervention in Huye District of Rwanda with focal attention on Maraba sector. The idea was to organize a comparative study where those who have benefited from the intervention are compared with those who are not beneficiaries. The comparison is then done as the participants provide answers to certain KEQs. These KEQs were collected in different subdomains of RQs using the 5-point Likert scale response, and then they are analyzed in order to determine the level of impact. The system of analysis adapted from Al Rubaish (2010)⁹ helped to grade the results into 3 categories of impact level or impact where score above 80 are regarded as High Quality or Excellent, below 80 but above 60 is regarded as Acceptable Impact or Good while scores graded below 60 are regarded as haven performed Poorly and Need Improvement. The communication of the findings was to provide a resource for the ECD sector for reference and also provide some recommendations to the community, stakeholders and the government where hopefully they can help in filling identified gaps from the study. Though the findings are indicative rather than sacrosanct conclusions because there is still room for further research, it is hoped that a few lessons can be identified for further improvement of program results.

The intention here is not to produce instructions for policy and practice for ECD centers in Rwanda, rather the objective is to make certain recommendations in order to improve popularity and enrolment as observed from the study, and this includes:

- To maintain interest and improve enrolments at ECD centers, the school feeding program must be sustained and the introduction of school fees must be discouraged.
- The volunteer caregivers who form part of the workforce at the ECD centers should be adopted into the workforce of the local government and thereby adequately compensated for their services.
- Implementation of awareness programs in rural areas to sensitize communities on the rights of children and especially with respect to early childhood development.
- The government should initiate the creation of a Trust Fund specifically dedicated to servicing ECD in Rwanda
- A feedback mechanism should be created at the community level where parents have the benefit of obtaining firsthand reports on the progress of their children and they can also share their opinions.

LIMITATIONS AND FUTURE RESEARCH

The researcher experienced several limitations in this study. First, coverage of the study was limited to 1 district out of the 30 districts across Rwanda. Then there was the challenge of sample selection from the 31 villages that make up the 6 cells of Maraba sector. The sample had to be drawn in order to at least have a fair representation of the 6 cells. Another limitation resulted from the language barrier. The poor comprehension of Kinyarwanda by the researcher affected the ability to directly collect data. To solve this, two competent data collectors were hired for the purpose of collecting data from identified sources. The data collectors were trained by the researcher on the specific needs of the study. The bureaucracy and length of time it took to get approval from the district office was quite a challenge. But in spite of the challenges, the efforts, and support of the local leadership of Maraba sector helped to overcome the foreseen obstacles especially with respect to data collection and field visits.

A point to note here is that this study is not considered as a fait accompli but rather provides a foundation for further research on the subject matter or related theme. So, concerning future study, the researcher intends to further investigate and improve on development of the Program Impact Evaluation Survey (PIES) as a simple analytic technique for basic evaluation.

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